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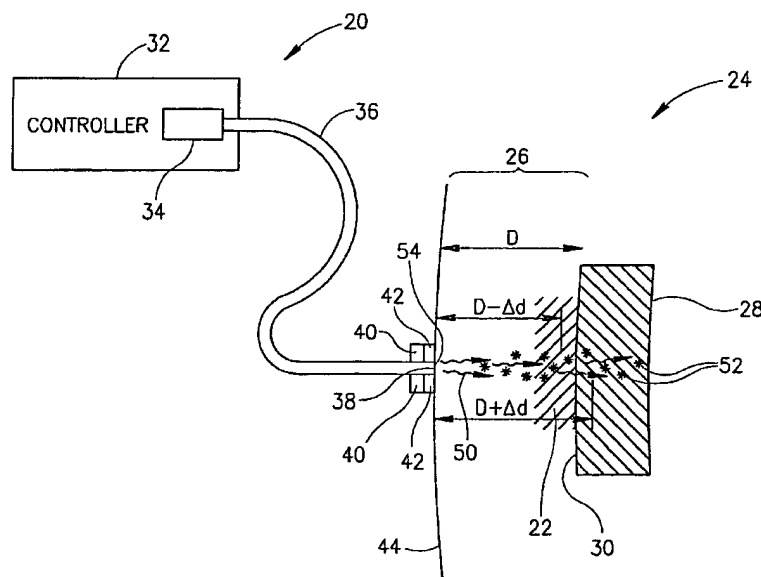
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[Continued on next page]

(54) Title: PHOTOACOUSTIC ASSAY METHOD AND APPARATUS



(57) Abstract: A method of assaying an analyte in a body part comprising: illuminating the body part with at least one pulse of light at each of first and second wavelengths that stimulates photoacoustic waves in a first, target, region and a second, reference, region of the body part, wherein the reference region interfaces with the target region and has at least one known optoacoustic property and wherein light at the first wavelength is absorbed by the analyte; sensing pressure in the photoacoustic waves from the target and reference regions stimulated by the light at the first and second wavelengths; and using the sensed pressures and the at least one known optoacoustic property to assay the analyte in the target region.

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